

Highly Charged Ion Extraction From EBIT and Super EBIT

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Highly charged ions are produced and extracted from two Electron Beam Traps located at the Lawrence Livermore National Laboratory. Low charge state ions and atoms are injected into traps and ionized to produce highly charged ions, (U^{90+} , Th^{80+} , Xe^{54+} to name a few) that are then extracted for experimental use. The ion beams available have energies of 1-20 kV/q with very low emittance and sufficient flux to perform various experiments including, ion-surface interactions (sputtering, surface modification, x-ray emission, and electron emission), external trapping (RETRAP), and focused ion beam development.

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